

including isomers, enantiomers, diastereomers, tautomers, pharmaceutically acceptable salts, prodrugs and solvates thereof wherein:

X^1 is $C=O$;

X^2 is CR^3 ;

X^3 is $-NH-$;

X^4 is CR^4 ;

X^5 is CR^5 ;

X^6 is CR^6 ;

R^1 is alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkyl, aryl, substituted aryl, heterocycloalkyl, or heteroaryl;

R^2 is cyano, hydroxy, oxo (double bond is no longer present between CR^2 and X^6), SR^7 , $S(O)R^7$, SO_2R^7 , $SO_2NR^8R^9$, CO_2R^7 , $C(O)NR^8R^9$, or heteroaryl;

R^3 is hydrogen, hydroxy, halogen, cyano, CO_2R^7 , NR^8R^9 , alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, cycloalkyl, substituted cycloalkyl, aryl, substituted aryl, heterocycloalkyl or heteroaryl;

R^4 , R^5 , and R^6 are independently selected from the group consisting of hydrogen, halogen, nitro, cyano,

$O-R^7$, NR^8R^9 , SR^7 , $S(O)R^7$, SO_2R^7 , SO_3R^7 , $SO_2NR^8R^9$, CO_2R^7 , $C(O)NR^8R^9$, $C(O)alkyl$, $C(O)substituted\ alkyl$, alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl and substituted alkynyl;

R^7 , R^{10} , and R^{11} , are independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, alkynyl, cycloalkyl, substituted cycloalkyl, $C(O)alkyl$, $C(O)substituted\ alkyl$, $C(O)cycloalkyl$, $C(O)substituted\ cycloalkyl$, $C(O)aryl$, $C(O)substituted\ aryl$, $C(O)Oalkyl$, $C(O)Osubstituted\ alkyl$, $C(O)heterocycloalkyl$, $C(O)heteroaryl$, aryl, substituted aryl, heterocycloalkyl and heteroaryl;

R^8 and R^9 are independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, alkenyl, alkynyl, $C(O)alkyl$, $C(O)substituted\ alkyl$, $C(O)cycloalkyl$, $C(O)substituted\ cycloalkyl$, $C(O)aryl$, $C(O)substituted\ aryl$, $C(O)Oalkyl$, $C(O)Osubstituted\ alkyl$, $C(O)heterocycloalkyl$, $C(O)heteroaryl$, aryl, substituted aryl, heterocycloalkyl, and heteroaryl or R^8 and R^9 taken together with the nitrogen atom to which they are attached complete a heterocycloalkyl or heteroaryl ring;

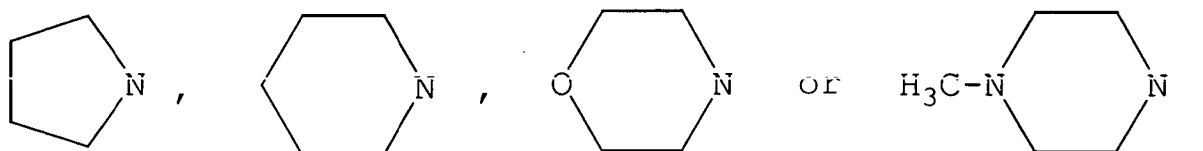
R^3 and R^1 may be taken together with the carbon atoms to which they are attached to form a monocyclic or substituted monocyclic ring system of 5 or 6 carbon atoms; and

R^4 and R^5 may be joined together by the chain

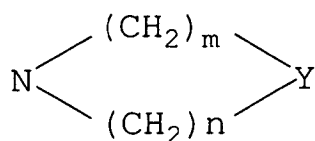
$-O-CH_2-O-$ or $-O-CH_2-CH_2-O-$;

with the following provisos:

- (a) when R^1 is substituted or meta unsubstituted phenyl, R^3 is H, R^4 is H, R^5 is H and R^6 is H, then R^2 is not PhCONH,



- (b) when R^1 is phenyl substituted with H, F, Cl, Br, I, CH_3 , CF_3 , OH, OCH_3 , OCF_3 , OCH_2CH_3 , NH_2 , $NHCH_3$, $N(CH_3)_2$, O-benzyl, $-C(=O)-R_0$, or $-C(=O)-OR_0$ and R_0 is a lower alkyl group, R^3 is H, R^4 is H, R^5 is H and R^6 is H, then R^2 is not



where Y is CH_2 , O or S, m and n are each greater than 1, and the sum of m and n is between 3 and 6; and

- (c) when R^2 is heteroaryl, at least one of the heteroatoms must be O.

Add the following new claims:

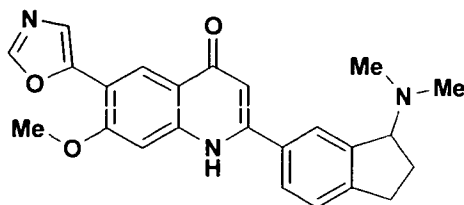
30. (new) A method of treating inosine monophosphate dehydrogenase associated disorders comprising: administering a therapeutically effective amount of a compound of claim 10.
31. (new) A method of treating inosine monophosphate dehydrogenase associated disorders comprising: administering a therapeutically effective amount of a compound of claim 11
32. (new) A method of treating inosine monophosphate dehydrogenase associated disorders comprising: administering a therapeutically effective amount of a compound of claim 12.
33. (new) A method of treating inosine monophosphate dehydrogenase associated disorders comprising: administering a therapeutically effective amount of a compound of claim 13.
34. (new) A method of treating inosine monophosphate dehydrogenase associated disorders comprising: administering a therapeutically effective amount of a phosphodiesterase Type 4 inhibitor and a compound of claim 10.

35. (new) A method for the treatment or prevention of allograft rejection comprising: administering a therapeutically effective amount of a phosphodiesterase Type 4 inhibitor and a compound of claim 10.
36. (new) A method of claim 34 wherein: the phosphodiesterase Type 4 inhibitor is Rolipram.
37. (new) A method of claim 34 wherein: the phosphodiesterase Type 4 inhibitor is [4-[3-(cyclopentyloxy)-4-methoxyphenyl]-2-pyrrolidinone].
38. (new) A method of treating inosine monophosphate dehydrogenase associated disorders comprising: administering an therapeutically effective amount of the pharmaceutical composition of Claim 17.
39. (new) A method of treating inosine monophosphate dehydrogenase associated disorders comprising: administering a therapeutically effective amount of the pharmaceutical composition of Claim 17 and another agent known to be useful in treatment of such disorders.
40. (new) A method of treating inosine monophosphate dehydrogenase associated disorders comprising: administering a therapeutically effective amount of the pharmaceutical composition of Claim 17 and a phosphodiesterase Type 4 inhibitor.
41. (new) A method for the treatment or prevention of allograft rejection comprising: administering a therapeutically effective amount of the pharmaceutical composition of Claim 17 and a phosphodiesterase Type 4 inhibitor.

RESPONSE TO RESTRICTION REQUIREMENT

The Office Action states that the claims of this application recite five (5) separate classes of invention. The Office Action requests that the applicant elect one of these classes for prosecution and a single species within the elected group. In response to this restriction requirement, applicant has canceled Claims 1-9 (process claims) and 24-29 (process claims), and amended Claims 10-23, without prejudice. Applicant reserves the right to present claims to those inventions in one or more divisional applications.

Applicant provisionally elects for prosecution, with traverse, compounds falling in Group 2 (e.g., quinolone compounds of formula I, as shown particularly in amended claim 10) and the species of Example 10.



Claims 10-23 are readable on this elected species as well as new claims 30-41. Applicant understands that this is a provisional election for purposes of search and examination, and that, if the elected species is found to be allowable, applicant's claims covering other disclosed species will be fully considered and examined.

Additionally, Applicant traverses the restriction requirements as set forth in the June 24th, 2002 Office Action for the following reason. Applicant has added new process of use claims dependent upon the Group 2 composition claims. While the new process of use claims are subsets of Groups I (claims 30-37) and V (claims 38-41) as defined by the Examiner they are coextensive with elected Group 2 composition claims (amended claims 10-23).

According to MPEP §803.01

[I]f the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to independent or distinct inventions.

Applicant asserts that because the new claims are coextensive with the amended composition claims, prosecution of both sets of claims would not pose a serious burden requiring multiple independent searches. Applicant thus traverses the restriction requirement and requests that a search and examination in this case be performed with regard to all claims now pending.

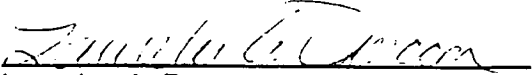
FEES

No fees should be due. Although eleven new claims are added, a total of fifteen claims were canceled including three independent claims. However, if it is determined that a fee is due, please charge same to Deposit Account No. 19-3880 in the name of Bristol-Myers Squibb Company.

The Examiner is invited to contact the undersigned by telephone, at the number listed below, if it is believed that a telephonic communication would facilitate the prosecution of this application.

Respectfully submitted,

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